# Specifications for IRF-PAI Submission Files
## For Submission from the Inpatient Rehabilitation Facility to the National Assessment Collection Database

## *Data Specification Notes: Version 1.00*

## *Files Included in the Data Specifications*

This document and several accompanying documents describe CMS's data specifications for submitting IRF-PAI data from an inpatient rehabilitation facility to the National Assessment Collection Database.  Below is a list of the documents included with these specifications:

- DS100.pdf          This document (9 pages).

- HD100.pdf          Detailed specifications for the header record (7 pages).

- HS100.pdf          Summary specifications for the header record (2 pages ).

- BD100.pdf          Detailed specifications for the body record (76 pages).

- BS100.pdf          Summary specifications for the body record (13 pages ).

- ID100.pdf          Detailed specifications for the inactivation record (5 pages).

- IS100.pdf          Summary specifications for the inactivation record (1 page).

- TD100.pdf          Detailed specifications for the trailer record (1 page).

- TS100.pdf          Summary specifications for the trailer record (1 page).

- AppendixA.pdf      RIC codes and associated impairment group codes


All of these documents are Adobe Acrobat® files.  You must have the Adobe Acrobat® reader to view and print these files.  The Adobe Acrobat® reader can be downloaded and distributed for free and is available from many sites on the Internet including the following:

> http://www.adobe.com

## *Microsoft Access Specification File*

The data specifications include a Microsoft Access database file which was used to generate the data specification reports.  This file may be useful to programmers or others who need to work with the data specifications.

The database contains four tables:

- **Header_Record_Definition.**  Contains detailed specifications for the header record.

- **Body_Record_Definition.**  Contains detailed specifications for the body record.

- **Inactivation_Record_Definition.**  Contains detailed specifications for the inactivation record.

- **Trailer_Record_Definition.**  Contains detailed specifications for the trailer record.

## *Submission File Structure*

A valid submission file consists of fixed length ASCII records. All records in the file must consist of 1258 data bytes followed by a carriage return (ASCII 013) and then a line feed (ASCII 010) for a total of 1260 bytes. Byte 1258 of each record must contain a % (percent sign) to indicate end of data.

Each submission file consists of a **Header Record** as the first record, one or more **Body Records and/or Inactivation Records**, and a **Trailer Record** as the last record. The records between the header and trailer records may consist entirely of body records, entirely of inactivation records, or any mixture of the two types of records. Body and/or inactivation records may be in any order within a submission file and the two types of records may be kept separate or may be intermingled. However, each submission file must contain at least one record that is either a body or inactivation record.

### Header Record

The header record has *A2* (capital A followed by two) in the first two bytes. The document **HD100.Pdf** presents a detailed layout for the header record. The header record contains basic identifying information for the facility submitting the IRF-PAI data and for contact persons and phone numbers to use in the event that the file is in error. An abbreviated version of the header record layout is presented in the document **HS100.Pdf**.

### Body Record

The body record has *B2* (capital B followed by two) in the first two bytes. The document **BD100.Pdf** presents a detailed layout for the body record. The body record contains information for a single IRF-PAI patient assessment. All body records consist of exactly the same fields in the exact the same order. An abbreviated version of the body record layout is presented in the document **BS100.Pdf**.

### Inactivation Record

The inactivation record has *X2* (capital X followed by two) in the first two bytes. The document **ID100.pdf** presents a detailed layout for the inactivation record. An abbreviated version of the inactivation record layout is presented in the document **IS100.pdf**. The inactivation record contains information that identifies a previously submitted body record which the inpatient rehabilitation facility wishes to inactivate. See "Submission of Inactivation Records" later in this document for a description of the use of the inactivation records.

### Trailer Record

The trailer record has *Z2* (capital Z followed by two) in the first two bytes. The document **TD100.Pdf** presents a detailed layout for the trailer record. The trailer record indicates the end of the submission file, and this record includes a count of the total records in the file including the header and trailer records. An abbreviated version of the data record layout is presented in the document **TS100.Pdf**.

### Appendix A

The document **AppendixA.pdf** contains Rehabilitation Impairment Categories and associated Impairment Group Codes. This list of impairment group codes is to be utilized for Item 21 (Impairment Group) on the IRF-PAI . Only the codes included on this list are valid codes for this field. Any code used in this field that is not on this list will result in record rejection.

## *Field by Field Specifications*

The detailed record layout and data specifications for each type of record (header, body, inactivation, and trailer) provide the information necessary to construct an acceptable submission file. Each record layout specification report (e.g., BD100.Pdf) contains the following report elements for each data item:

- **Item.** This report element provides a unique item number for each field in the record layout. Where a field corresponds to an IRF-PAI data item, the item number includes the appropriate item designation. For example, item 12 (Admission Date) on the IRF-PAI assessment form is referred to in the body record specifications as Item 12.

- **DB Name.** This element provides a description of each field as it appears in the National Assessment Collection Database.

- **Description.** This element provides a verbal description of the data field.

- **Len.** The length of the data item in the record layout.

- **Start.** The starting byte of the data item in the record layout.

- **End.** The ending byte of the data item in the record layout.

- **Picture.** A COBOL-style picture specification for the data field.

- **Type.** Indicates the type of field:

  - **Text.** Indicates a variable length text field (e.g., a city name).

  - **Date.** Indicates a date field (all date fields must be formatted YYYYMMDD).

  - **Code.** Indicates that the field can possess any one of a limited set of coded values.

  - **Count.** Indicates an integer count field.

  - **Filler.** Indicates a field which must be blank filled.

- **Range.** Indicates the range of valid values which a field can assume. Note that the convention *sp(x)* is used to indicate spaces (e.g., *sp(1)* indicates a single space, *sp(5)* indicates 5 spaces).

- **Format info.** Provides information about how data must be formatted (e.g., right justified, zero filled, etc.).

- **Consistency required.** Provides information about the logical relationships between the current field and other fields in the layout. The following are some examples of how this report element is used:

  - **Skip patterns.** The response to some IRF-PAI items are contingent upon the response to other items.

  - **Checklist patterns.** Some checklists allow only one item in the list to be checked. Other checklists allow multiple responses (i.e., "check all that apply"). Some responses (e.g., "none of the above") preclude responses to the other items in the list.

  - **Date relationships.** Certain dates on IRF-PAI assessment have logical relationships with other dates on the assessment.

## *Body Record Date Consistency*

The body record contains the following date fields:

|        |                              |
|--------|------------------------------|
| Item 6 | Birth Date                   |
| Item 12 | Admission Date              |
| Item 13 | Assessment Reference Date    |
| Item 23 | Date of Onset of Impairment  |

|            |                          |
|------------|--------------------------|
| Item 40    | Discharge Date           |
| Item 43A   | First Interruption Date  |
| Item 43B   | First Return Date        |
| Item 43C   | Second Interruption Date |
| Item 43D   | Second Return Date       |
| Item 43E   | Third Interruption Date  |
| Item 43f   | Third Return Date        |

The purpose of this section is to describe the rules which govern the relationships among these dates.  One of the rules involve the number of days between certain dates.  Please note that these calculations are based upon **calendar** days, not work days.

These consistency rules are of two types.  The first type involves date sequencing, which insures that the chronological order of dates is logical (e.g., it is illogical for a patient's Birth Date to occur later than the Admission Date).  Violations of these rules are fatal errors that will lead to record rejection by the National Assessment Collection Database.

The second type of rule involves timing.  Dates on the IRF-PAI record are used to check the timing of certain events (e.g.., that the number of days between various events doesn't exceed the regulatory thresholds).  Because inpatient rehabilitation facilities are required to always submit data even if these timing rules are not followed, these consistency checks are not fatal; they will result only in warnings and the records with timing rule violations will <u>not</u> be rejected when submitted to the National Assessment Collection Database.

The first section below describes the fatal errors associated with the date sequencing rules.  The remainder of this section describes the timing rules.

## Date Sequencing Rules

Date sequencing rules refer to the chronological order of the events described by the dates listed below.  There is a logical sequence implied by these dates that must be followed.  For example, it is illogical for the patient Birth Date to be later than the Admission Date.  Each body record must follow these date sequencing rules or fatal errors will occur leading to rejection of the record when it is submitted to the National Assessment Collection Database.

The chronological sequence of IRF-PAI dates is as follows:

| | | |
|---|---|---|
| 1. | Item 6   | Birth Date                  |
| 2. | Item 23  | Date of Onset of Impairment |
| 3. | Item 12  | Admission Date              |
| 4. | Item 13  | Assessment Reference Date   |
| 5. | Item 43A | First Interruption Date     |
| 6. | Item 43B | First Return Date           |
| 7. | Item 43C | Second Interruption Date    |
| 8. | Item 43D | Second Return Date          |
| 9. | Item 43E | Third Interruption Date     |

10.  Item 43f                    Third Return Date

11.  Item 40                    Discharge Date

To determine whether dates are in the proper chronological sequence in a body record do the following:

1.  Exclude any dates from this list which do not occur (are blank) in the record (e.g., some Interruption Dates may not be completed.).

2.  Each remaining date must be less than or equal to every date which follows in the list.

3.  A fatal error will occur if any date in the list is later than any other date which follows on the list.

There are a few additional fatal date edits:

1.  No date can be later than the current date.

2.  Item 6 (Birth Date) can be no more than 140 years prior to the current date.

3.  Item 12 (Admission Date) cannot be earlier than 1980.

The consistency checks described in the detailed body specifications incorporate these sequencing rules and list violations as fatal errors.

### Timing Rules

Currently, there is one timing rule in the IRF-PAI data specifications.   It is as follows:

1.  Item 13 (Assessment Reference Date) usually must be 2 days after item 12 (Admission Date).  This implies the following test:

> Item 13 (Assessment Reference Date) - Item 12 (Admission Date) = 2

Failure to follow this rule will only result in warning message, but the National Assessment Collection Database will still accept the record.

## Submission Timing Rules

Currently, there is only one submission timing rule.  If an assessment is submitted 28 days or more after the discharge date, the IRF-PAI may be subject to penalties.  Such records will not be rejected, but warning messages will be issued.

## Correction Procedures

After an assessment has been completed, data entry has been finalized, and the assessment has been submitted to the national database, no further changes should normally be made to the assessment record.  However, corrections are allowed if a data entry error has been made.  The purpose of this section is to describe the proper procedures for making corrections.

The discussion of correction procedures below uses two terms which need to be defined.

- *CORRECTION_NUM* is a counter field in the body record (bytes 58-59) which is used to track corrections made to an assessment record.  This counter field must always be set to *00* when a record is initially submitted.  Under certain circumstances (described below) it must be incremented to indicate that a correction record is being submitted (i.e., *01* would be used for the first correction to the assessment record, *02* for the second correction, and so on).

- *Key fields* are fields used by the National Assessment Collection Database to uniquely identify an assessment.  The table below lists the key fields contained on an assessment record.

| Key Fields | |
|---|---|
| **Patient Identifiers:** | |
| Item 4 | Patient First Name |
| Item 5A | Patient Last Name |
| Item 6 | Birth Date |
| Item 7 | Social Security Number |
| Item 8 | Gender |
| **IRF-PAI Identifiers:** | |
| FAC-ID | Unique Facility ID code |
| **Assessment Event Identifiers:** | |
| Item 12 | Admission Date |

The following scenarios explain how corrections should be made.

1. If an assessment has been submitted to the National Assessment Collection Database and is *rejected*, the facility staff can reopen the assessment, make necessary changes, and resubmit it. CORRECTION_NUM should not be incremented in this situation.

2. If an assessment has been submitted and *accepted* by the National Assessment Collection Database, and the facility staff determine that corrections must be made to a *non-key fields only* (i.e., fields not contained in the list above), the facility should do the following:

   - Make a new copy of the record.

   - Revise any non-key fields necessary in the new assessment record.

   - Increment CORRECTION_NUM by one digit in the new assessment record.

   - Submit the corrected assessment.

   Both the original assessment and any subsequent correction assessments are stored in the national database. The national database keeps only the most recent version of the record (i.e., the version with the greatest CORRECTION_NUM) on its active table; all other, corrected versions are retained in a history table. Most national system reports use only the active records.

3. If an assessment has been submitted and *accepted* by the National Assessment Collection Database and the facility staff determine that a correction must be made to a *key field* (listed above), then a key field correction must be completed. A key field correction involves submitting an inactivation record, described below, which removes the erroneous assessment from the national system's database of active records. If appropriate, a new, replacement assessment can then be submitted with CORRECTION_NUM set to *00*.

4. If an assessment has been inadvertently submitted for a non-Medicare patient, **inactivation is not sufficient** to remove the assessment from the National Assessment Collection Database. The reason for this is that inactivation does not delete a record, it simply moves it from the table of active records to the history table. Therefore, assessments for non-Medicare patients must be manually deleted from the database. When such

a deletion is necessary, the facility can submit a deletion request to the Iowa Foundation for Medical Care (IFMC), which is the database administrator.

5. If a test batch of assessments is inadvertently submitted as a production batch, ***inactivation is not sufficient*** to remove the assessments from the National Assessment Collection Database. The reason for this is the same as described in item #4 above. The same procedure should be followed to request that the assessments be deleted.

The flow chart on the following page summarizes the IRF-PAI correction procedures.

Please note that according to CMS's policy, when an assessment is corrected, the facility must maintain the original assessment record as well as all subsequent corrected assessments in the patient's clinical record for five years. If maintained electronically, the facility must be capable of retrieving and reproducing a hard copy of these assessments upon request. It is acceptable to have multiple corrected assessments for an IRF-PAI assessment, as long as the IRF-PAI and the clinical record document the changes made.

## Inactivations

As noted above, inactivations are sometimes required to remove records which are in error but which have been accepted by the National Assessment Collection Database. By including inactivation request records in their submission files, as described below, users can remove assessments from the national system's active database. Inactivated records are not actually deleted. Instead, they are moved from the active database to a history database which contains records which have been modified or inactivated. This approach keeps an audit trail of modified and inactivated records, but "hides" them from the normal system reporting procedures.

Please note that the inactivation procedure should be used only if the non-key field record modification procedure does not apply. In other words, if an assessment contains errors only in non-key fields, then the CORRECTION_NUM method described above should be used. However, if an error has been made in one or more key fields or if an assessment was submitted in error, then the erroneous assessment should be inactivated.
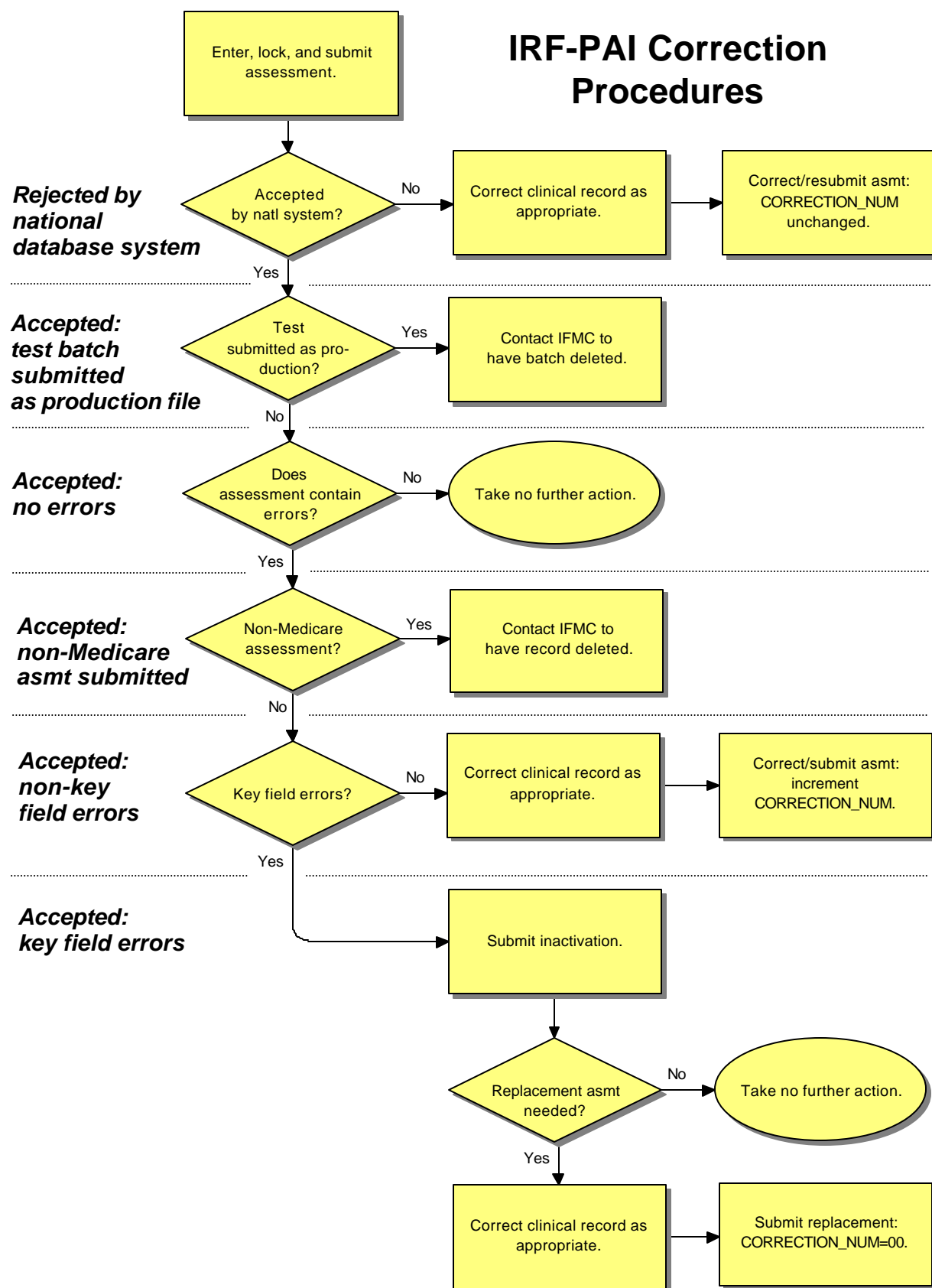
Inactivations are accomplished by using a special type of record, which is designated by the code "X2" in the REC_ID field (the first two bytes of the record). A submission file is not required to have any inactivation records, but if they occur they must occur between the header and trailer record. Every submission file must begin with one header record, end with one trailer record, and must have one or more body or inactivation records between the header and trailer. The user may submit as many body and/or inactivation records as desired. The record count in the trailer record must include the count of all records in the submission file including the header, the trailer, and any body or inactivation records which are present.

The inactivation record contains a limited number of fields which, for the most part, consist of the key fields listed in the table above. Each of the fields in the inactivation record parallels a field contained in the body record. Each of the inactivation fields is in the same record position (i.e., has the same starting and ending bytes) as the corresponding body record field. Intervening segments of the inactivation record contain filler. Any data contained in these filler fields will be ignored by the national system.

To insure that the proper record is inactivated, the facility's data submission software should fill each of the fields in the inactivation record with *exactly* the same information as was contained in the assessment which is to be inactivated.

It should be noted that the CORRECTION_NUM field is not included on the inactivation record (CORRECTION_NUM is in bytes 58-59 of the body record). The reason for this is that once an inactivation is successfully processed, all copies of an assessment will have been inactivated (this includes the original assessment, with CORRECTION_NUM = *00*, as well as any subsequent corrections with CORRECTION_NUM = *01, 02,* etc.). Since it is not possible to inactivate a particular correction of a record, there is no reason to include CORRECTION_NUM on the inactivation record.

# IRF-PAI Correction Procedures

**Enter, lock, and submit assessment.**

**Rejected by national database system**

Accepted by natl system? — No → Correct clinical record as appropriate. → Correct/resubmit asmt: CORRECTION_NUM unchanged.

Yes ↓

**Accepted: test batch submitted as production file**

Test submitted as production? — Yes → Contact IFMC to have batch deleted.

No ↓

**Accepted: no errors**

Does assessment contain errors? — No → Take no further action.

Yes ↓

**Accepted: non-Medicare asmt submitted**

Non-Medicare assessment? — Yes → Contact IFMC to have record deleted.

No ↓

**Accepted: non-key field errors**

Key field errors? — No → Correct clinical record as appropriate. → Correct/submit asmt: increment CORRECTION_NUM.

Yes ↓

**Accepted: key field errors**

Submit inactivation.

↓

Replacement asmt needed? — No → Take no further action.

Yes ↓

Correct clinical record as appropriate. → Submit replacement: CORRECTION_NUM=00.

Once an erroneous assessment has been inactivated, a replacement assessment may be submitted, if appropriate.  For example, if an assessment was submitted with an incorrect patient birth date (item 6), an inactivation record would be submitted and a replacement assessment with the correct birth date would be submitted.  The replacement assessment would have a CORRECTION_NUM equal to *00*.  Note that both the inactivation and the replacement assessment may be included in the same submission batch, if desired.

There currently are no requirements regarding the timeliness of inactivation records, either in terms of when they must be completed or submitted.  However, we urge users to submit inactivations as quickly as possible after errors are identified so that the national database will be as current and accurate as possible.

## *Prospective Payment System*

Every assessment which is submitted to the National Assessment Collection Database must have a case mix group and a case mix group version code.  The case mix group (SBMTD_CMG_TXT) is in bytes 754-763 of the body record, while the case mix group version code (SBMTD_CMG_VRSN_TXT) is in bytes 764-773.  When an assessment record is received by the national database, it recalculates the case mix group using information in the assessment record.  If the calculated case mix group differs from the submitted group, a warning is issued.  In addition, if the submitted case mix group version code is incorrect, a warning is issued.  Both of these conditions are warnings – records with these errors will not be rejected.

Grouper software for the IRF-PAI prospective payment system is being made available on CMS's web site.  The software and related materials come in a .ZIP file containing a DLL, pseudocode, test cases, and other documentation. The grouper software accepts IRF-PAI assessment data as input and outputs the case mix group code and the case mix group version conde.  Please refer to the grouper documentation for further information.